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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/893,914	06/28/2001	Dina Katsir	216-028B	5885

7590 04/10/2003  
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EXAMINER

STEIN, STEPHEN J

ART UNIT	PAPER NUMBER
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1775

DATE MAILED: 04/10/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/893,914

Applicant(s)

KATSIR ET AL.

Examiner

Stephen J Stein

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 21 January 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 29-37 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 29-37 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

#### ***Priority***

2. Applicants have claimed domestic priority under 35 U.S.C. 120 as a continuation of US serial number 09/334,664. (See Applicants' preliminary amendment filed June 28, 2001). This serial number does not correlate with applicants' specification. The examiner queries as to whether this is a typographical error.

#### ***Claim Rejections - 35 USC § 102***

3. Claims 34-37 are rejected under 35 U.S.C. 102(b) as being anticipated by being anticipated by US Patent 5,822,177 (Popp et al.).

Popp teaches an electrolytic capacitor comprising an electrode of an aluminum metal anode foil (electrically conductive valve metal substrate) and a dielectric layer of aluminum oxide (valve metal oxide) formed on the aluminum anode foil (col. 1, lines 15-25). Popp further teaches that the electrode has a fractal surface coating (a discontinuous coating) (col. 2, lines 38-57).

With regard to the process limitations recited in claims 34-37, regarding the oxide layer being vacuum deposited, process limitations in product claims are generally not dispositive on patentability unless it is shown that the process limitations produce a materially different product. MPEP §2113.

***Claim Rejections - 35 USC § 103***

4. Claims 29-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Popp et al. in view of US Patent 5,431,971 (Allegret et al.).

As stated above, Popp teaches an electrolytic capacitor comprising an electrode of an aluminum metal anode foil (electrically conductive valve metal substrate) and a dielectric layer of aluminum oxide (valve metal oxide) formed on the aluminum anode foil and further teaches that the electrode has a fractal surface coating (a discontinuous coating). Popp fails to teach that the fractal surface coating includes both a valve metal and a metal oxide thereof.

Allegret teaches an anode or cathode of an electrolytic condenser (capacitor) comprising aluminum substrate and an a coating based on aluminum and aluminum oxide (col. 2, lines 49-53). Allegret further teaches that that this special composition of the metal and oxide coating adheres well to the substrate and has good stability with the passage of time to external agents (col. 2, lines 23-29).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention to apply an electrode coating of a  $\text{Al-Al}_2\text{O}_3$  as taught by Allegret for the fractal coating on the capacitor electrode substrate as disclosed by Popp, because it would provide both good adherence to the metal substrate and good stability over time.

With regard to the claimed length of the fractal surface effects, absent a showing of criticality with respect to the size of the surface effects, it is within the ordinary skill of one in the art to optimize the size of the fractals through routine experimentation. It has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. In re Boesch, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

### ***Response to Arguments***

With regard to claims 34-37, applicants' argue that amended claims 34-37 fail to be anticipated by the Popp reference because the claims have been amended to include the limitation "a discontinuous *vacuum deposited* layer", wherein in Popp the layers are deposited by electrolysis or electrolytic deposition. This argument has been considered, but not deemed persuasive. The limitation vacuum deposited is interpreted as a process limitation in a product claim and process limitations in product claims are generally not dispositive on patentability unless it is shown that the process limitations produce a materially different product. MPEP §2113.

With regard to claims 29-33, applicants argue that amended claims 29-33 fail to be anticipated by Popp, because the claims have been amended to include the limitation that fractal structure includes both valve metal and an oxide thereof. This argument has been persuasive and the 102 rejection has been withdrawn. New rejections under 35 USC 103 have been made over the claims in response to the amendment to the claims.

### ***Conclusion***

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

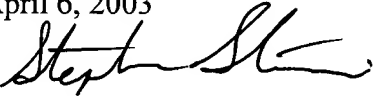
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

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will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen Stein whose telephone number is (703) 305-0583. The examiner can normally be reached on Monday through Friday from 8:30 a.m. to 5:00 p.m. If the attempts to reach the examiner are unsuccessful, the examiner's supervisor, Deborah Jones can be reached by dialing (703) 308-3822. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group Receptionist whose phone number is (703) 308-0661. The fax phone number for this group is (703) 872-9310 for non-final responses and (703) 872-9311 for after final responses.

April 6, 2003



Stephen J. Stein



DEBORAH JONES  
SUPERVISORY PATENT EXAMINER